

REMARKS

The Invention

In general, the present application relates to a system and method wherein a mobile data device is provided with a preferred roaming list that includes information indicating whether each network in the list (*e.g.*, a 3G network) supports 3G data capabilities (as opposed to, for example, 3G voice capabilities). This is advantageous because not all 3G networks are capable of supporting data services and by including information regarding the 3G data capabilities of the network in the preferred roaming list the battery life of the mobile data device is prolonged or preserved since the mobile data device will not attempt to access a 3G network lacking 3G data capabilities when 3G data capabilities are needed.

Status of the Claims

Claims 29-33, 35-41, 43 and 44 are pending in the application.

Claims 1-28, 34 and 42 have been canceled.

Claims 29-33, 35-41, and 43-44 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Claims 29-30, 37-38, and 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Aerrabotu et al.*, (U.S. Patent No. 6,993,336) in view of *Chiniga et al.* (U.S. Patent No. 6,415,148).

Claims 31-33 and 39-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Aerrabotu* ('336) in view of *Chiniga* ('148) and *Guilford et al.* (US2002/0087674 A1).

Claims 35 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Aerrabotu* ('336) in view of *Chiniga* ('148) and further in view of *Seppanen et al.* (U.S. Patent No. 5,903,832).

Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Aerrabotu* ('336) in view of *Chiniga* ('148) and further in view of *Russell* (U.S. Patent Publication No. 2004/0249915).

Claims 29-33, 35, 37-41, 43, and 44 have been amended. Support for the amendments is found in last paragraph on page 10, on page 11, lines 14 to 23, and table 6. Advantages are described on page 11, lines 9 to 13. Additional device capabilities related functionality is described in the last paragraph on page 11 (all references with respect to the originally filed application).

Claims 29-33, 35-41, and 43-44; Rejected under 35 U.S.C. § 112

Claims 29-33, 35-41, and 43-44 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. More specifically, the Examiner states that the specification does not have support for the recitation of a “mobile data device gives preference to various ones of the plurality of system preference criteria to create the ranking of available networks.” The Examiner further states that, “[a]ll available evidence in applicant's specification points to non-existence of mobile data device creating ranking of available networks. As can be seen from the specification: Each mobile device includes a preferred roaming list (PRL) built into it, which assists the device to perform system selection and acquisition (page 2 lines 5-9). Further only place applicant specification talks about rank is in page 6 lines 25-28 which says: The PRL then ranks the priority of each system.” Thus the Examiner concludes that, “[t]his clearly shows that PRL with rank has already built into it user preferences for selection of networks as described in table 1.” Applicants disagree.

Initially, it is noted that the passage the Examiner cites states that the PRL “ranks” the priority of each system. In this sentence, the word “ranks” is a transitive verb. (See attached definition from Merriam-Webster Online Dictionary). A transitive verb indicates an action is performed by the subject of the verb and occurs to the object of the verb. In this sentence, the subject is the PRL and the object is the “priority of each system.” Thus, as properly read, this sentence indicates that the PRL is performing the action of actively ranking the priority of each system. If the Examiner’s interpretation of the system is used, this sentence would make no sense. That is, a PRL with rank already built into it could not

perform the action of “ranking” the priority of each system as that rank would already exist. For the Examiner’s interpretation to make sense, this sentence would have to read that the PRL “looks up,” or an equivalent verb, the rank of each system. Therefore, it is clear that reference to the PRL not only includes the data therein, but also the functionality that one skilled in the art would apply to such data.

It is further noted that the sentence referred to by the Examiner is the first sentence of the paragraph and includes the word “then.” The word “then” is used to indicate where in a chain of events the PRL ranks the priority of each system. That is, the prior paragraph, para. 0027 as published, of the specification discloses that the PRL “includes” the stated information. “Then” the PRL acts upon this “included” information to create a ranking, as set forth in para. 0028. Again, it would be understood by those skilled in the art that the PRL has both data and an associated functionality. That is, upon reading these two paragraphs, those skilled in the art would understand that selected data is provided to the PRL and that the PRL may act upon that data.

This is contrary to the Examiner’s interpretation. That is, the Examiner appears to conclude that the “rank” of each system is information that is “included” in the PRL; however, as demonstrated herein, nothing in the specification supports this conclusion. Moreover, the specification clearly states that PRL actively performs the action of ranking the systems as recited in the claims.

It is further noted that a rejection under 35 U.S.C. § 112, first paragraph, is based upon the entire application. With this rejection, the Examiner appears to base the rejection of the language of the claims not appearing verbatim in the specification. However, as noted in MPEP §2163, “... t here is no *in haec verba* (“in these words”) requirement, [but] newly added claim limitations must be supported in the specification through express, **implicit, or inherent** disclosure.” (Emphasis added). It is further stated that, “[a]n amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of the error in the specification, but also recognize the

appropriate correction. *Id.* citing *In re Oda*, 443 F.2d 1200, 170 USPQ 268 (CCPA 1971).

MPEP §2163 also notes that, “[g]enerally, there is an inverse correlation between the level of skill and knowledge in the art and the specificity of disclosure necessary to satisfy the written description requirement. Information which is well known in the art need not be described in detail in the specification.” *Id.* citing *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379-80, 231 USPQ 81, 90 (Fed. Cir. 1986). Further, when discussing the written description of software under 35 U.S.C. § 112, first paragraph, and specifically the best mode requirement, MPEP §2163 states that, “[a]s a general rule, where software constitutes part of a best mode of carrying out an invention, description of such a best mode is satisfied by a disclosure of the functions of the software. This is because, normally, writing code for such software is within the skill of the art, not requiring undue experimentation, once its functions have been disclosed. * * *

Thus, flow charts or source code listings are not a requirement for adequately disclosing the functions of software.” *Id.* citing *Fonar Corp. v. General Electric Co.*, 107 F.3d 1543, 1549, 41 USPQ2d 1801, 1805 (Fed. Cir. 1997).

It is noted that, to those skilled in the art, the act of ranking various systems based upon a set of known criteria is easily accomplished. It is further noted that those skilled in the art of connecting a mobile device to a wireless system would have sufficient knowledge to not attempt to connect to a system that is not available. Thus, while not set forth *in haec verba*, one skilled in the art would understand the function of the PRL and how the PRL operates as “once [the code’s] functions have been disclosed” writing the code “for such software is within the skill of the art, not requiring undue experimentation.” Accordingly, the specification adequately supports Claims 29 and 37.

It is further noted that, based on the foregoing, the amendment to the specification does not add new matter, but is merely a rephrasing of the original disclosure as set forth in paragraphs 0026-0028. That is, para. 0026 indicates that the mobile device has lost its signal. As noted above, it is inherent, and would be

known to those skilled in the art, that available systems must be found. Further, in para. 0028 it is disclosed that the PRL has an associated functionality structured to perform a ranking of the systems. Thus, stating that, “the then current PRL list of preferred networks is considered together with the then available networks to derive a ranked list of available networks” is merely a rephrasing of the original disclosure.

Accordingly, the rejection under 35 U.S.C. § 112, first paragraph, and the objection under 35 U.S.C. § 132(a) are in error and should be withdrawn.

Claims 29-30, 37-38, and 44; Rejected under 35 U.S.C. § 103(a)

Claims 29-30, 37-38, and 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Aerrabotu et al.*, (U.S. Patent No. 6,993,336) in view of *Chiniga et al.* (U.S. Patent No. 6,415,148). *Aerrabotu* discloses a method for a mobile device to acquire a signal including the steps of providing a PRL that includes selected data. The method further provides for determining which networks included on the PRL are available and connecting to a network as identified by the PRL. As noted by the Examiner, *Aerrabotu* does not disclose that the method or device creates a ranking of the available networks.

Chiniga discloses a method for switching to a preferred network if the presently active network is not the most preferred network. That is, *Chiniga* discloses a method wherein the mobile device includes a PRL as well as a most recently used (“MRU”) list. These lists are combined into a “scan list” with the MRU entries at the head of the queue. It is noted that neither of these list is based upon which networks are actually available to the device. When attempting to acquire a signal, the device steps through the list in a consecutive order until a signal is acquired. After a signal is acquired, the device creates an alternate scan list (“ASL”) wherein various networks are ranked according to selected factors in the MRU and PRL. It is noted that the ASL is based on the entire list of networks in a geographical area, and not on the networks that are available to the device. *See*, Col. 8, lines 10-12. Accordingly, the *Chiniga* device and method will attempt

to connect to a preferred network regardless of whether that network is actually available. Thus, this method wastes energy and ties up the transmitter/receiver in multiple attempts to connect to a network that may, or may not, be available.

Accordingly, *Aerrabotu* discloses the use of a PRL and *Chiniga* discloses creating an ASL having rankings after the device is connected to a network. Thus, neither of these references disclose creating a ranking of **available** networks **prior** to connecting to the network. Further, as *Chiniga* discloses creating an ASL having rankings after the device is connected to a network, the combination of *Chiniga* with *Aerrabotu* cannot disclose creating a ranking of **available** networks **prior** to connecting to the network.

Further, with regard to the determination of obviousness under 35 U.S.C. § 103, the Supreme Court has stated that:

Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, *it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does*. This is so because inventions in most, if not all, instances rely on building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

KSR International Co. v. Teleflex Inc., ___ U.S. ___, ___, 2007 WL 1237837 (2007), (Slip Opinion at 14-15) (emphasis added). In addition, the Supreme Court also noted that:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, *this analysis should be made explicit*. See *In re Kahn*, 441 F.3d 977, 988 (Fed Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, *there must be some articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness*”).

Id., at ____ (Slip Opinion at 14) (emphasis added). It is noted that the Supreme Court included an extended discussion reciting the nature of the inventions disclosed in the prior art and then several paragraphs identifying the rationale and reasons that the cited art could be combined and why one skilled in the art would make such a combination. *Id.*, at ____ (Slip Opinion at 3-6, 20-22).

With regard to combining known elements of an invention, the Supreme Court further stated that, “[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *Id.*, at ____ (Slip Opinion at 14). This holding comports with *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), which held that, although some of the cited references individually may have some of the claimed inventions’ features, “one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention.” *Id.* at 1075. Instead, to reach the proper conclusion under §103:

The decision maker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made. In light of *all* the evidence, the decision maker must then determine whether... the claimed invention as a whole would have been obvious at *that* time to *that* person.

Id. at 1073-74. (emphasis added).

The Examiner has not properly supported the rejection under 35 U.S.C. § 103(a) and under *KSR International*. In the Office Action, the Examiner has merely identified a list of selected elements recited in the present application and located various references, wherein the Examiner contends similar elements are disclosed. As set forth above, Applicants dispute that these elements are that similar to the elements recited in the claims of the present application. Further, the Examiner has not “made explicit” the reason such references would, or could, be combined as suggested. That is, the Examiner has, after identifying a number of elements in the prior art, stated that, “it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify *Aerrabotu’s* system to provide for the following: mobile device gives preference to various one of the plurality of system

preferences criteria to create the ranking of the available networks as this arrangement would provide means to select more desirable service provider to meet user needs as taught by *Chiniga*.” Office Action at 5.

However, merely identifying specific elements that various references disclose, stating that they may be combined, and providing a conclusory statement that the cited art may be combined is not an “articulated reasoning with some rational underpinnings” sufficient to support the conclusion of obviousness. That is, the Examiner has failed to describe the “interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.” Moreover, as set forth by the Court in *KSR International*, a “patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” In fact, the single sentence provided by the Examiner is the type of “mere conclusory statement” that the *KSR International* Court held cannot properly support a rejection under 35 U.S.C. § 103.

Moreover, given that the Examiner has provided a single conclusory statement regarding the combination of these references, the Examiner has failed to identify a motivation for combining these references and has failed to discuss how such a combination would be accomplished in such a manner as to disclose the invention recited in the present application. For example, the claims of the present application recite creating a ranked list of available networks prior to connecting to the network. The Examiner has failed to explain how one skilled in the art tasked to combine these references would perform *Chiniga*’s step of creating an “alternate” system list, with rankings, prior to *Aerrabotu*’s step of connecting to a network, given that the “alternate” list is a list of networks that the device is not connected to. That is, the proposed combination is impossible as *Chiniga*’s ASL cannot be created until after the device is connected to the network. However, to teach or suggest the claims of the present application, the ranked list must be created prior to the time the device is connected to the network. This is just one example of how these

references cannot be combined. Applicants reserve the right to address any other problems with the proposed combination should the Examiner present an articulated reasoning with some rational underpinnings sufficient to support the conclusion of obviousness as required by *KSR International*.

Accordingly, as these references fail to teach or suggest each element of the rejected claims, as these references cannot be combined as suggested by the Examiner, and as the Examiner has failed to properly support the rejection under 35 U.S.C. § 103(a) and under *KSR International*, the rejection of Claims 29-30, 37-38, and 44, as amended, under 35 U.S.C. § 103(a) should be withdrawn.

Claims 31-33 and 39-41; Rejected under 35 U.S.C. § 103(a)

Claims 31-33 and 39-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Aerrabotu* ('336) in view of *Chiniga* ('148) and *Guilford et al.* (US2002/0087674 A1). The deficiencies of *Aerrabotu* and *Chiniga* are, as well as the Examiner's failure to properly support the rejection under 35 U.S.C. § 103(a) and under *KSR International*, is discussed above. The Examiner asserts that "Guilford discloses intelligent network selection based on quality of service and applications over different wireless networks which teach: plurality of system criteria include information about whether each of the available networks support: data roaming for mobile data device, support mobile IP, always-on device (paragraphs: 7-16; 21-23; 27-28; 45; 51-62; 66-67; 72-73, 79; figs. 2,4, 7a)." The Examiner makes no other statement regarding *Guilford* and provides no other information as to how this reference could, or should, be combined with *Aerrabotu* and *Chiniga*. Applicants further note that *Guilford* fails to disclose creating a ranked list of available networks prior to connecting to the network.

As set forth above, under 35 U.S.C. § 103(a) and under *KSR International* an Examiner must provide an "articulated reasoning with some rational underpinnings" sufficient to support the conclusion of obviousness and describe the "interrelated teachings of multiple patents; the effects of demands known to the

design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.”

In the rejection of Claims 31-33 and 39-41, however, the Examiner has merely provided a summary sentence stating that *Guilford* discloses selected system criteria. Following this sentence, without any further explanation, the Examiner states that, “it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: plurality of system criteria include information about whether each of the available networks support: data roaming for mobile data device, support mobile IP, always-on device as this arrangement would provide the user to select required service based on his needs as taught by *Guilford*, thus providing means to meet user needs.”

Thus, the Examiner has, essentially, stated that the claimed invention includes elements A+B+C, that each cited reference discloses one of these elements, and *therefore* it “it would have been obvious to one of ordinary skill in the art at the time invention was made to” combine these elements. That is, the Examiner has merely identified a list of elements and stated that they may be combined. Such an analysis is not sufficient to support a rejection under 35 U.S.C. § 103(a) and under *KSR International*, as well as *Fine*. Applicants further note that one skilled in the art would have difficulty incorporating *Guilford* into *Aerrabotu* and *Chiniga*, however, Applicants reserve the right to address this issue after the Examiner has provided an articulated reasoning with some rational underpinnings as to how these references may be combined.

Accordingly, as these references fail to teach or suggest each element of the rejected claims, as these references cannot be combined as suggested by the Examiner, and as the Examiner has failed to properly support the rejection under 35 U.S.C. § 103(a) and under *KSR International*, the rejection of Claims 31-33 and 39-41, as amended, under 35 U.S.C. § 103(a) should be withdrawn.

Claims 35 and 43; Rejected under 35 U.S.C. 103(a)

Claims 35 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Aerrabotu* ('336) in view of *Chiniga* ('148) and further in view of *Seppanen et al.* (U.S. Patent No. 5,903,832). The deficiencies of *Aerrabotu* and *Chiniga* are, as well as the Examiner's failure to properly support the rejection under 35 U.S.C. § 103(a) and under *KSR International*, is discussed above. The Examiner asserts that *Seppanen* discloses, "mobile terminal having enhanced system selection capability which teaches: storing prioritized list of all networks and selecting desired network to meet services capable of being handled by mobile terminal (abstract and claim 19)". The Examiner makes no other statement regarding *Seppanen* and provides no other information as to how this reference could, or should, be combined with *Aerrabotu* and *Chiniga*. Applicants further note that *Seppanen* specifically states that the device "maintains a single, prioritized list of all available networks." Col. 3, lines 56-57.

As set forth above, under 35 U.S.C. § 103(a) and under *KSR International* an Examiner must provide an "articulated reasoning with some rational underpinnings" sufficient to support the conclusion of obviousness and describe the "interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art."

In the rejection of Claims 35 and 43, however, the Examiner has merely provided a summary sentence stating that *Seppanen* discloses a device storing prioritized list of all networks and selecting desired network to meet services capable of being handled by mobile terminal. Following this sentence, without any further explanation, the Examiner states that, "it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: mobile data device stores a list of service features that mobile data device supports and (sic) plurality of system preference criteria includes a list of services the network supports as this arrangement would provide means for

selecting and using networks to meet desired user services such as data service or fax service etc as taught by *Seppanen* (col. 4 lines 38-52).”

Thus, the Examiner has, again, merely identified a list of elements and stated that they may be combined. Such an analysis is not sufficient to support a rejection under 35 U.S.C. § 103(a) and under *KSR International*, as well as *Fine*. The Examiner does not, for example, disclose how *Seppanen* with its single list of available networks is to be integrated into *Chiniga* with its three lists, *i.e.* MRU, PRL, and ASL. Applicants reserve the right to address this issue, as well as others, after the Examiner has provided an articulated reasoning with some rational underpinnings as to how these references may be combined.

Accordingly, as these references fail to teach or suggest each element of the rejected claims, as these references cannot be combined as suggested by the Examiner, and as the Examiner has failed to properly support the rejection under 35 U.S.C. § 103(a) and under *KSR International*, the rejection of Claims 35 and 43, as amended, under 35 U.S.C. § 103(a) should be withdrawn.

Claim 36; Rejected under 35 U.S.C. § 103(a)

Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Aerrabotu* (‘336) in view of *Chiniga* (‘148) and *Russell* (U.S. Patent Publication No. 2004/0249915). The deficiencies of *Aerrabotu* and *Chiniga* are, as well as the Examiner’s failure to properly support the rejection under 35 U.S.C. § 103(a) and under *KSR International*, is discussed above. The Examiner asserts that “*Russell* teaches the following: choosing step can find no networks are available (fig. 8, paragraph: 0096).” The Examiner makes no other statement regarding *Russell* and provides no other information as to how this reference could, or should, be combined with *Aerrabotu* and *Chiniga*. Applicants further note that *Russell* fails to disclose creating a ranked list of available networks prior to connecting to the network.

As set forth above, under 35 U.S.C. § 103(a) and under *KSR International* an Examiner must provide an “articulated reasoning with some rational

underpinnings” sufficient to support the conclusion of obviousness and describe the “interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.”

In the rejection of Claim 36, however, the Examiner has merely provided a summary sentence stating that *Russell* discloses a certain process if a network is not available. Following this sentence, without any further explanation, the Examiner states that, “it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: choosing step can find no networks are available as this arrangement would facilitates the user to learn the no network is available for connection as taught by *Russell*, so that user is not kept in darkness as to availability of the network.”

The Examiner has, again, merely identified a list of elements and stated that they may be combined. Such an analysis is not sufficient to support a rejection under 35 U.S.C. § 103(a) and under *KSR International*, as well as *Fine*. Applicants further note that one skilled in the art would have difficulty incorporating *Russell* into *Aerrabotu* and *Chiniga*, however, Applicants reserve the right to address this issue after the Examiner has provided an articulated reasoning with some rational underpinnings as to how these references may be combined.

Accordingly, as these references fail to teach or suggest each element of the rejected claims as these references cannot be combined as suggested by the Examiner, and as the Examiner has failed to properly support the rejection under 35 U.S.C. § 103(a) and under *KSR International*, the rejection of Claim 36 under 35 U.S.C. § 103(a) should be withdrawn.

CONCLUSION

In view of the remarks above, Applicants respectfully submit that the application is in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. C. Jenkins', with a stylized, flowing script.

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